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## NAVAL ART AND THE PRISM OF CONTEMPORANEITY: SOVIET NAVAL OFFICERS AND THE LESSONS OF THE FALKLANDS CONFLICT

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# Naval Art and the Prism of Contemporaneity: Soviet Naval Officers and the Lessons of the Falklands Conflict

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## Foreword

Over the years, the effectiveness of military weaponry has been enhanced to an increasing degree by technology until today soldierly prowess on the battlefield is less and less dependent on physical strength. High technology continues to be the force multiplier which in fact determines the outcome of combat operations.

Modern weapons are not forged in the heat of battle, but rather in a scientist's laboratory and/or in an engineer's computer, thereby imparting an element of uncertainty as to their effectiveness in actual wartime conditions. In this situation, those who design, produce and deploy those weapons are most interested in the results obtained when troops use them in combat.

All the "little" wars since World War II, from Korea to the Middle East to Afghanistan and the Falklands, have involved various advanced technology weaponry, and the major military powers have eagerly totaled the balance sheet during and after each conflict. The superpowers have been able to "go to school" in these conflicts, and the results of their evaluations will influence the design of future weapons systems.

In this context, then, it is important for us to study the way in which the Soviet Union has reviewed and judged the relative effectiveness of weapons and operations in the brief but intense struggle between Great Britain and Argentina.

The Center for Strategic Technology is most pleased to have been able to bring to this task one of the most able and agile military minds in the U.S. today, that of Dr. Jacob Kipp of the Department of History at Kansas State University, currently in a visiting faculty position at Miami University. Dr. Kipp's incisive study traces the Soviets' varied reactions to the Falklands War and provides some most interesting commentary on their analyses.

Richard E. Thomas  
Director  
The Center for Strategic Technology  
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Much as professional historians do not like to admit it, history does seem to have a way of repeating itself. Current events and those from the past do focus the mind of the observer on historical parallels and invite historical comparisons. Such was the case for this author in his own reflection on the Falkland Conflict. Having spent the better part of four years studying the impact of technological modernization on the Russian Navy in the second half of the nineteenth century, I was intrigued by the lively debates among Russian naval officers regarding the lessons to be drawn from the naval wars of the late nineteenth and early twentieth centuries, including their own disastrous involvement in the Russo-Japanese War. Russian naval officers, like naval professionals elsewhere, had lived through radical changes in the art of waging war at sea, had little or no combat experience until the battles of the Russo-Japanese War, and were trying to draw out the lessons of these naval wars in order to reformulate their own tactical and strategic conceptions.<sup>1</sup>

In the spring of 1982, when the Falklands Conflict erupted between Great Britain and Argentina, I was teaching a course on naval history and so found myself drawn to the press accounts and then the first attempts at analyzing the Conflict in naval journals. I read with interest the British White Paper on the Falkland Conflict when it appeared in December 1982. All this literature shared a common theme about the Falklands Conflict. As Former Secretary for Defense John Nott described the involvement of British forces, "The campaign provided the Royal Navy's first experience of battle in the missile age."<sup>2</sup> While Nott cautioned against applying lessons learned in the South Atlantic to the Navy's mission in NATO, the fact that it was the first large-scale naval campaign of the postwar period attracted the attention of defense analysts from around the globe.<sup>3</sup>



For this observer, the question immediately arose: How are the Soviet naval officers treating this conflict in their literature? Do they see it as an event from which important lessons about naval tactics, operations, and strategy can be drawn? Have they begun the process of integrating the lessons of the Anglo-Argentine Conflict into their own system of military science and through that into Soviet military doctrine? Have their perceptions about the naval art in the contemporary world been changed as a result of the Falklands War? To answer any of these questions, it is necessary to do two things. The first, and a relatively simple operation, is to collect the relevant Soviet naval literature. The second involved the integration of the comments of that literature into the categories of Soviet military science.

#### The Ideological Prism and Military Science

For all Soviet officers, "military science is the system of knowledge about the character and laws of war, on the preparation of the armed forces and the country for war and the means to conduct it."<sup>4</sup> It is based upon Marxist-Leninist ideology, which serves as a prism through which external events are organized and categorized. It has a class basis and is infused with the spirit of the Party. It is, however, also shaped by the practical experience of war, and it is the unity of theory and practice which ultimately, according to the Soviets, guarantees the successful application of military science to the conduct of armed conflict.<sup>5</sup> As a recent work by a group of senior officers with the Soviet Academy of the General Staff of the Armed Forces asserted:

The most concentrated expression of military-scientific knowledge are to be found in Soviet military doctrine, which embodies a system of scientifically sound views on the reality, character, and



means of conducting war, as well as on the demands of military construction, the preparation of the armed forces and country for the complete defeat of the aggressor. Soviet military doctrine finds its concrete manifestation in the theory and practice of the construction of the armed forces, in strategy, operational art, and tactics.<sup>6</sup>

Thus, military science and military doctrine are intimately linked in Soviet military thought. Military doctrine is described in the Soviet Military Encyclopedia as a "system of views, which have been adopted by a state, on the goals and character of a possible war, on the preparations of the country and its armed forces for war, and on the means to conduct the war." Military doctrine determines what sort of enemy against whom the probable war will be fought, the character and objectives of the war in which the state and its armed forces are expected to participate and the missions of the armed forces. Military doctrine in the Soviet view has two closely connected and mutually conditioned sides: the political and the military-technical, with the preeminent role going to the former. The political side, which manifests the influence of Clausewitz on Marxist-Leninist concepts, includes questions relating to the political goals and character of war, the influence of these matters on the construction of the armed forces and on the preparation of the nation for war. The military-technical side, in keeping with the political conditions, includes questions relating to the means of conducting war, military structure, and the technical equipping of the armed forces and the maintenance of their combat readiness.<sup>7</sup> Military science shapes and, in turn, is shaped by military doctrine.

One part of the Soviet military science is military art, which has been defined as "the theory and practice of the preparation and conduct of

military actions on land, at sea and in the air. The component parts of military art are strategy, operational art, and tactics."<sup>8</sup> In the case of the Falklands Conflict, the character of that conflict made its analysis fall within one particular area of Soviet military art, i.e., Soviet naval art. The naval art has been defined as: "The theory and practice of the preparation and conduct of combat actions by forces of navy independently or in combined action with other types of the armed forces."<sup>9</sup> As the authors of The History of the Naval Art reminded their readers in 1969: The Navy is one of the branches of the Soviet Armed Forces. It fulfills its missions on the basis of a unified military doctrine for all of the Soviet Armed Forces, common site strategy.<sup>10</sup> The Naval art deals with questions relating to the "preparation and conduct of military actions at sea, of naval operations, and battles and includes the study of the strategic use of the Navy, operational art, and naval tactics."<sup>11</sup> Soviet naval commentators on the Falklands Conflict thus are operating within a very specific intellectual-institutional environment, one dominated by an ideological prism and a given bureaucratic structure relating to defense matters. However, their mandate to study and comment upon changes in the conduct of war at sea is broad. Their ideology emphasizes the process of change in human affairs. "Since war at sea, just like war in general, is a socio-historical phenomenon, the forms and methods of the use of the navy's forces, i.e., the naval art, are changed by the alteration of the socio-economic formation of these major stages of the historical development of human society."<sup>12</sup> Such changes in the phenomenon of war are not, however, of purely academic or ideological interest. Soviet naval officers are instructed to study the history of the naval art in order "to

understand the phenomenon in its modern manifestation and even more to foresee its future."<sup>13</sup> Thus, in its practical implications, Soviet studies of the Falklands Conflict are directed towards the prediction of the future nature of warfare at sea and so occupy a central place in the concerns of the naval art. Prediction ranks with partiinost' and purposefulness as the peculiarities that link Soviet military theory and praxis. It is the demands of military praxis which determine the concrete goals of military-scientific research, its problems and missions.<sup>14</sup>

#### Military Science and the Falklands

Forecasting or predicting in Soviet military science plays an important role since such "searches" address the resolution of concrete problems relating to military organizational development, the influence of scientific discoveries on the creation of new technical means of war, on the means of conducting military actions in future wars, perspectives on the modernization of the structure of the armed forces, their individual types and branches, the correlation of attack and defense, of offensive and defensive operations. The resolution of such "search problems of military science," according to Soviet military intellectuals, has an effect on the development of military art, military-technical policy, and the ways of increasing the combat readiness of the army and navy.<sup>15</sup> Military praxis must be studied in all its complexity. As the collective of authors from the Soviet General Staff Academy of the Armed Forces assert:

All forms of military praxis have a direct significance for the development of military science and its concrete areas--strategy, operational art, and tactics. However, the praxis of combat activities of troops gives the most valuable factual material. The experience of combat action against a powerful, technologically equipped enemy serves as that important step on the ladder of military knowledge without which new military theory cannot be built without which no sort of movement forward in military affairs is possible.<sup>16</sup>

In general, Soviet military researchers are instructed to return to the primary documents in their studies of the planning and conduct of past military operations, but there is also a deep appreciation of the need to study modern instances of the use of armed forces. The analysis and generalization of the experience of contemporary local wars and armed conflicts is important because of what such analysis can contribute to the development of the military art. Indeed, Soviet authors point out that the aggressive forces of imperialism have looked on local wars as proving grounds for the testing of the latest models of weapons which could also be used in a world war.<sup>17</sup> Thus, Soviet analysis of the Falklands Conflict does address a primary task for Soviet military science, and because of the nature of that conflict, for the naval officer-practitioners of military-scientific research.

#### Sources

Morskoi sbornik (Naval Digest), the journal of the Soviet Navy, has served as the primary forum for the discussion of the Falklands Conflict. One of the oldest professional naval publications in the world, founded in 1848, Morskoi sbornik continues to be a vehicle for the analysis of professional issues facing the Navy. During the tenure of Admiral Sergei Gorshkov as Commander-in-Chief of the Soviet Navy, the journal has carried several important series of articles, including the Admiral's own "Navies in War and Peace" and the recent set on "The Theory of the Development and Use of the Navy."<sup>18</sup> While the implications of these and other series of articles have been issues of debate within the Western analytical community, there is common agreement that the topics of the series represented central questions relating to the future development of the Soviet Navy.<sup>19</sup>

Morskoi sbornik began its series of articles on the Falklands Conflict with an unsigned, three-page treatment of the hostilities in its July 1982 issue. The article, entitled "Aviation Against Ships: Regarding the Anglo-Argentine Conflict," was scarcely more than a brief introduction to the course and outcome of the conflict, although it clearly indicated what some within the editorial collective of Morskoi sbornik saw as the central issue: the effectiveness of air operations against surface combatants.<sup>20</sup> The second article in the series did not appear for four months and was carried in the section of the journal devoted to information about foreign navies. Its author, Rear Admiral I. Uskov, couched his presentation in terms of the lessons learned from the Falklands Conflict and concentrated upon the implications of the conflict for the role of surface warships in warfare at sea. Morskoi sbornik followed the Uskov article with an article on an aspect of the conflict in each of the next three issues. The first two were a two-part article on the war by two captains in the Soviet Navy, Captain 1st Rank B. Rodionov and Captain 2nd Rank N. Novichkov, on aviation tactics against warships and electronic warfare. Rodionov and Novichkov discussed at length the implications of new technologies--cruise missiles, radars and other sensor systems, air defense complexes, and automated systems of command and control on the basis of the Falklands Conflict.

The authors of the articles published in 1982 presented their discussions of the lessons of the hostilities on the basis of foreign press reports and presented conclusions drawn by unnamed Western military specialists. The third article, in the February 1983 issue of Morskoi sbornik, represented something of a departure in this regard. Although it carried the statement that it was based upon material of the foreign press,



it had been placed in the prestigious section of the journal devoted to "naval art." Its author, Admiral I.M. Kapitanets, Commander of the Baltic Fleet, treated the larger issue of the role of the navy in the Anglo-Argentine Conflict and touched upon many of the issues raised in the earlier articles. Kapitanets' emphases and conclusions were different in a number of ways from the earlier pieces. His article was nevertheless a dialectical synthesis of these earlier treatments and carried with it greater authority in its treatment of the impact of the hostilities on the execution of "fleet against fleet" and "fleet against shore" tasks. In March, E. Ratkin's article treating the landing itself appeared. In April 1983, the most recent article in the series appeared. This article discussed in detail a topic that had been introduced in Uskov's piece, the Royal Navy's "Mobile Rear" in the South Atlantic. While these articles were again placed in the journal section devoted to information on foreign navies, they were distinctive in the fact that their authors carried no designation of naval rank.<sup>21</sup>

This series which includes to date 7 articles and over 40 printed pages of material, present a serious investment of effort and editorial space to topics of major concern to the Soviet Navy. Collectively, they treat the Falklands Conflict as the first modern naval war of the postwar era, a struggle, according to Rear Admiral Uskov, where "the basic tasks of the combatants could be achieved either with the help of the navy or in combat with the navy."<sup>22</sup> As an examination of the military praxis of foreign navies, including a modern naval force belonging to a hostile military coalition, the articles should be seen as an aspect of the ongoing debate about the development of the naval art and, particularly, the theory of the development and use of the navy.

### Ideological Elements

The articles contain a general description of this "naval war." And although most of the treatment of the conflict addresses questions of naval organization, weapons systems, and the conduct of naval operations, the articles do contain a more general discussion of the ideological implications of the conflict for the nature of the threat confronting the Soviet Union and the socialist camp. The authors in Morskoi sbornik did not choose to treat the Falklands Conflict as just another local war, i.e., hostilities conducted by imperialism against nations struggling for national independence.<sup>23</sup> The first article in the series offered a historical background of the Anglo-Argentine dispute over ownership of the Falklands and chose to characterize Argentina as "an unaligned country." However, other Soviet articles have chosen to treat the conflict as a struggle among imperialist states, reflecting the Leninist thesis regarding the uneven development of capitalism as a source of conflict among such states. Soviet naval authors have attributed materialist motives to the British decision to defend the islands from Argentine seizure and point to the possible presence of 70-80 billion tons of oil in the continental shelf around the islands as the motive.<sup>24</sup> This explanation, which seems to suggest that modern capitalism has entered an era of intense struggle and competition for oceanic resources, fits well within the theses developed by Admiral Sergei Gorshkov in The Sea Power of the State regarding the oceans as a natural resource base and the need of the state to exploit those resources.<sup>25</sup> It is a theme that Admiral Gorshkov returned to in December 1982 in an article entitled, "Contemporary Problems of the Study and the Exploitation of the World Ocean."<sup>26</sup>



### Link to Western Defense Strategy

Such assessments of the likely course of relations among the capitalist powers and the centrality of competition for oceanic resources have, however, been linked in Soviet naval circles with a specific shift in Western defense strategy in the 1970's towards an "oceanic" posture. As Vice Admiral K.A. Stalbo pointed out in 1981, Western naval presence and suasion by naval forces had to be taken into account in resolving questions relating to the defense of the USSR. The Soviet Navy had to be deployed in these strategic oceanic theaters of operation where the threats to the Soviet Union and its interests arise from the naval forces of the "imperialist aggressors".<sup>27</sup> A Western oceanic strategy, according to Stalbo, must be answered by a Soviet oceanic strategy.

Admiral Kapitanets, in his discussion of the British decision to fight for the Falkland Islands, asserts that her majesty's government was motivated by a desire to keep control of strategic raw materials--in this case, oil--and to control an important strategic position on the sea routes from the Atlantic to the Pacific and the shores of Antarctica. Kapitanets goes further to assert that U.S. policy supporting Great Britain was in part based on the desire to strengthen its position in the South Atlantic. He qualifies this assessment later by stating that the U.S. support of Britain was, in part, a function of the American desire to maintain the unity of the NATO alliance and that in a choice between its hemispheric obligations and those to its European allies, it would elect to support the latter because of NATO's role in U.S. strategy against the Soviet Union and the Soviet Bloc.<sup>28</sup>

The Falklands Conflict emerges in the Morskoi sbornik series as a local war with a difference. Although Argentina was at one point described

as a non-aligned country, in the Rodionov and Novichkov article it was a country, run by a military regime, with a \$40 billion dollar foreign debt and possessing no arms industry of its own.<sup>29</sup> England, on the other hand, was consistently treated as a declining imperial power which, although it possessed a modern arms industry, found that it lacked many of the tools necessary to follow a policy of gunboat diplomacy in so distant a region. While Soviet naval officers were unanimous in their favorable comments about the British mobilization for war, they repeatedly pointed to deficiencies in the British order of battle and geo-military position. This was, they assert, an "unaccustomed factor" for the British Admiralty.<sup>30</sup>

#### Phases

All Soviet naval officers writing on the Falklands Conflict share a common periodization of the conflict. They divide the struggle into three distinct phases and characterize them as: the mobilization and deployment phase, the blockade and counter-blockade phase, and the amphibious operations phase. The first phase lasted from the end of March 1982 until the arrival of the Royal Navy's first echelon off the Falklands and the British declaration of a 200-mile war zone around the islands on April 12. The second phase continued for more than a month until May 21, when the amphibious assault on Port San Carlos began the final phase of the campaign, which ended on June 14 with the surrender of the Argentine garrison at Port Stanley. British success in each phase, according to Soviet naval authors, contributed to the final outcome of the campaign. Successful mobilization and deployment involved the resolution of a number of tasks associated with the great distance of the theatre from England and allowed the British to change decisively the correlation of forces in the

theatre to their advantage, particularly in terms of air power, where the Argentines had enjoyed a seven-to-one advantage at the time of the arrival of the first echelon but which had been changed to a three-to-one advantage by the time of the amphibious assault.<sup>31</sup>

#### "Mobile Rear"

Rear Admiral Uskov was the first Soviet author to point explicitly to the importance of the mobilization and deployment battle as having a decisive impact on the outcome of the conflict. Uskov emphasized the importance of surface warships in the combat operations and pointed out that without them the English could not have achieved their operational objectives. The success of the Royal Navy's surface ships depended upon the creation of an "operational fleet," which could perform all the missions necessary to the achievement of the primary operational objective--the retaking of the Falkland Islands. Uskov pointed to the two ASW carriers with their mix of VSTOL and helicopter assets as the core of the British task groups, but he emphasized the fact that mobilization and the creation of a logistical support structure for the operational fleet made possible sustained operations in theatre. This mobilization and logistical structure Uskov described as a "mobile rear" (podvizhnyi tyl) and pointed out that the ratio of combatants to auxiliaries in the Royal Navy's operational fleet was one to one. Both Admirals Uskov and Kapitanets described the British fleet off the Falklands as a "balanced fleet," and Kapitanets goes so far as to suggest that England's ability to deploy 98 ships, including 57 warships (two ASW carriers and two atomic submarines), more than 150 airplanes and helicopters, and 8,000 marines and soldiers in two and one half months was a decisive factor in the final British victory.<sup>32</sup> Given the condition of Soviet at-sea logistical

support, these comments on the role of the Royal Navy's "mobile rear," take on added significance.

In a detailed treatment of the British logistical services, N. Evgen'ev described what he saw as the central features of the system. In his treatment of the "mobile rear," Evgen'ev attributed British success to a combination of factors. He is explicit in his emphasis upon the linkage between at-sea logistical support for task groups and the need for forward bases. Thus, the availability of U.S. basing facilities on Ascension Island throughout the conflict made it possible to develop an intermediary base through which supplies could be dispatched to the combat zone.<sup>33</sup> Evgen'ev's point seems to be that the operations of naval formations in distant theaters require such bases, and superpowers cannot and should not be dependent upon the favors of other states for such basing.

Evgen'ev points out that the Royal Navy had a limited number of auxiliaries available to support its fleet operations, but this number was quite inadequate to meet the needs of its operational fleet off the Falklands. Evgen'ev pinpoints a shortage of tankers within the Royal Navy as a critical problem that would have prevented uninterrupted combat operations off the islands by surface ships and aviation had the Admiralty not requisitioned and leased more than 20 private tankers. Evgen'ev also states that Britain's allies made available some their naval tankers for the transport of aviation fuel to Ascension Island. Evgen'ev was also impressed with the mobilization of two other types of vessels for use by the Royal Navy: passenger liners as troop transports and containerships as aviation platforms and transports. In the case of the conversion of civil passenger liners, the Soviet author noted the speed of the conversion of

the Canberra and Queen Elizabeth II. Regarding the use of the containerships, Evgen'ev pointed to their importance in providing indigenous aviation to the second and third echelons when they made their deployment to the region. In this manner, the containerships, Atlantic Conveyor and Atlantic Causeway, not only provided the air reinforcements to the aviation aboard the ASW carriers but also made it possible for both ships to remain in the combat zone on a sustained basis and thus allowed the British to maintain their blockade of the islands.<sup>34</sup>

The Royal Navy's "mobile rear" involved more than intermediary bases and fleet auxiliaries. Evgen'ev devoted substantial attention to the role of transport aviation in the British logistical system. Rapid deployment of about 1,000 men and equipment by plane to Ascension Island allowed the British to prepare the facilities there to handle the first echelon while it was in the process of steaming south. Air operations out of Ascension assumed a major character with more than 600 take-offs by Hercules and Victor aircraft from the island in the course of the conflict. Evgen'ev estimates that over 5,000 men and 7,000 tons of equipment were flown into Ascension Island.

Evgen'ev also took particular note of two other aspects of British air logistic operations out of Ascension Island. The first was the use of Hercules transports to fly equipment to the operational fleet and the use of paradrop and helicopter pick-up to recover such cargos. The entire operation has relevance to the Soviet Navy's own distant operations. Since such resupply allowed for the timely arrival of critical spare parts and other equipment in the absence of a carrier-based capability to receive such materials directly on the flight deck, the second aspect concerned the



use of air-to-air refueling by the British. Evgen'ev credits the British with having conducted more than 600 air-to-air refueling operations with a failure rate of about one percent. Such refueling made possible the paradrop-recovery operations of fleet supply off the Falklands; they extended the amount of patrol time of British Nimrods up to 15 hours; and air-to-air refueling capability of Harrier aircraft enabled some of these aircraft to fly to Ascension Island.<sup>35</sup> Finally, Evgen'ev also mentioned the tactical use of helicopters to support the amphibious operations and the advance on Port Stanley.<sup>36</sup>

Evgen'ev's conclusions on the results of the battle of mobilization were nothing more than an endorsement of the British logistical system. Against a systematic mobilization of national resources for the conduct of the campaign, the Argentines were lost. In spite of the distance between Ascension Island and the combat zone, British forces did not experience shortages in supplies, while the Argentine garrison under air and sea blockade quickly began to feel the effects of shortages of ammunition, spare parts, and provisions.<sup>37</sup> The projection of national power into distant theaters of operation, Evgen'ev concludes, requires a well-planned and well-organized logistical system and should include a "mobile rear" and a system of forward basing. Given the recognition that has been given by Marshal Ogarkov, Chief of the General Staff of Soviet Armed Forces, to the oceanic character of the Soviet Navy and the ability of its modern surface ships and submarines to sail faster and further and to stay at sea longer, there is every reason to believe that improved logistical support for the Soviet Navy is integral in its role in the defense of state interests and the cause of international socialism.<sup>38</sup> Evgen'ev's commentary on the demands of a modern naval logistical system should be seen as an agenda for

the modernization of Soviet naval and air logistical capabilities in the years ahead. Admiral Kapitanets inferred this point in his summation of the lessons to be drawn from the Falklands Conflict:

The course of the military events during the conflict demonstrate that the success of combat operations in carrying out the "fleet versus fleet" and "fleet versus shore" missions depends to a great extent upon the close combined action of all branches of naval forces. During the actions of formations and separate warships under modern conditions, their all-round support through the use of forward bases and a floating rear has a major significance.<sup>39</sup>

### Blockade

Soviet authors discussed the correlation of forces in the combat zone and pointed out the relative advantages of the respective combatants. Returning frequently to the theme of the Falklands Conflict as the first postwar naval war, i.e.; "the first combat operations in 40 years characterized by the large scale use of naval forces with the resolution of the basic tasks by the forces of the navy."<sup>40</sup> Turning to the second stage of the conflict, they emphasized the operations associated with the blockade of the islands and the Argentine efforts to break it. For all the Soviet authors, the central issue of this phase of the conflict was the ability of British naval forces to sustain the blockade. Although of short duration, the hostilities saw the deployment of more than 180 warships and vessels. Soviet authors point out that the correlation of forces in the theater of operations as 1:1 and that the Argentines enjoyed a substantial advantage in the air with a 7:1 ratio of aircraft at the start of the blockade. Soviet authors do note the fact that the British were able to reinforce their assets during the blockading phase of the operation, while degrading Argentine air power so that during the amphibious phase the ratio had declined to 3:1. The substantial British



advantage of 7:1 in SAM launchers with their fleet was pointed out by some Soviet analysts. Rear Admiral Uskov, in particular, called attention to the qualitative advantages that the British forces enjoyed: modern or modernized warships, SAMs, AAMs, and torpedoes.<sup>41</sup> The British also had advanced sensor systems, radar, and automated command and control. British means of collecting intelligence were enhanced by U.S. capabilities. The Soviet authors also point to the role that technical intelligence about Argentine weapons systems--many of which had been purchased from England or its allies--allowed the British to devise more effective counter-measures.<sup>42</sup>

Such British qualitative advantages not only negated the Argentines' numerical superiorities in important weapon systems, but allowed the British to operate effectively in a combat zone where geographic circumstances gave the Argentines potential benefits. Here, effective British staff work resulted in tactical deployments of naval forces during the blockading phase of the operation that substantially negated that advantage. As Captains Rodionov and Novichkov point out, Admiral Woodward placed his carrier task forces to the northeast of the Islands beyond the effective range of Argentine shore-based attack aviation. At the same time, the Argentines themselves had failed to take a series of measures that would have improved their forces' capabilities to make use of the geographic circumstances. On the one hand, the Argentine Navy lacked an at-sea refueling and resupply capability, having only one fleet oiler. On the other hand, although the Argentine Navy possessed a potentially formidable weapons system against the British carriers in the Super Etendard/Exocet cruise missile combination, the Argentine naval air crews still did not have the requisite flying skills to operate from the Argentine carrier, 25 de Mayo.<sup>43</sup>

## Submarines

The Soviet authors credit the presence of atomic submarines in the British order of battle with having had a decisive impact on the outcome of the blockading phase of the operation. The sinking of the cruiser General Belgrano on May 2, according to Admiral Kapitanets, had a decisive impact on the conflict because the Argentine Navy ceased to operate outside its own coastal waters. Without an effective ASW defense, the Argentine Navy could not risk sorties into the combat zone.<sup>44</sup> Rear Admiral Uskov is even more particular in his attribution of operational importance to British nuclear submarines. In his opinion, these craft allowed the British to sustain an effective blockade to the west of the Falklands in an area where, as events would prove, their surface combatants could operate only with extreme risk.<sup>45</sup> While in common agreement about the contribution of SSNs to British victory, the Soviet authors are not in common agreement about the contribution of diesel-powered submarines. Admiral Kapitanets concludes that the "balanced development and close cooperation of the principal branches of naval forces--submarines, aviation and surface ships--is a necessity," but he gave prominence to the high combat capabilities of nuclear submarines and the need to perfect ASW techniques against them.<sup>46</sup> Rear Admiral Uskov also considered the role of diesel submarines and found their contribution quite limited. On the Argentine side, he attributed their poor performance to ineffective training, while on the British side he noted that they were deployed as part of the ASW screen of British surface task groups and were not directly engaged. For a navy with nearly 180 diesel submarines in active service, Uskov's comments seem to point in two directions: more intensive training to guarantee combat readiness and the assignment of the assets to missions where they

can operate in a less effective enemy ASW environment or can depend upon the support of Soviet surface combatants in conducting their own ASW operations.<sup>47</sup>

#### Air Supremacy and Air Operations

While nuclear submarines proved their worth in sustaining the British blockade, Soviet naval officers saw the central problem of this stage of the conflict as the struggle for command of the air. Admiral Kapitanets, citing Western commentators, asserted:

"...the role of aviation continues to rise in combat actions at sea. Without gaining and holding command of the air on an operational and tactical scale, it is impossible to count upon success in a battle or in a whole operation."<sup>48</sup>

However, the struggle for command of the air over the Falklands was closely tied to the air defense battle against both aircraft and guided cruise missiles, and in this situation electronic warfare "emerged not as a means of support but as a means of combat action, directly and mutually connected with air defense."<sup>49</sup>

Two of the articles in Morskoi sbornik treated the struggle for command of the air over the Falklands. The first dealt with air tactics against warships, and the second treated electronic warfare there. The authors emphasized that direct and mutual relationship between air defense and electronic warfare. They presented the basic British problem as one of developing an effective, echeloned system of task force defense that included ASW operations and a three-staged system of air defense. The latter arrangement, the Soviet authors point out, was a consequence of the absence of long-range radar patrol aircraft and air superiority fighters from the inventory of the British operational fleet. In lieu of this, the British had to rely upon a system of distant radar picket ships. These

ships had to operate outside the range of the task groups' combat air patrol of Sea Harriers.<sup>50</sup>

The successful Argentine attack on the HMS Sheffield was, according to these authors, a result of these operational circumstances. Rodionov and Novichkov describe in some detail the Argentine attack upon the Sheffield, including the role of target acquisition radar on an Argentine Neptune in the attack and the low-altitude approach to the target by the Super Etendards.<sup>51</sup> Clearly, the low-flying missile posed a substantial threat to modern combatants. However, the loss of the Sheffield also represented a failure of the ship's electronic warfare systems. The Soviet authors repeat the claim that the Sheffield's active air defense radar was turned off in order for the ship to use the Sky Net communication system for conversations via satellite with London. This fact, in their opinion, still does not explain the fact that the ship had only six seconds warning before the missile struck. According to Rodionov and Novichkov, the Sheffield's passive radar detectors should have acquired the signature of the Exocet's own radar at a distance of 20 miles and given the ship a warning time of 100 seconds.<sup>52</sup> As the authors suggest in their discussion of subsequent British anti-missile measures, such additional warning time, when linked to automated systems of air defense, could have protected the ship. As they point out, passive electronic counter-measures did on several occasions save British warships from severe damage by missiles. The most conspicuous example of this occurred during the final phase of the campaign when four land-launched Exocets were fired at HMS Glamorgan, but the ship was able to avoid being hit by all but one.<sup>53</sup> The British system of counter-measures sometimes resulted in unexpected damage as when those

measures directed two Exocets away from the carrier, HMS Hermes, toward the containership, Atlantic Conveyor, which unexpectedly hit and sank her.<sup>54</sup>

Extensive discussions of the air and anti-air operations during the blockade phase of the campaign have centered upon the problems of an integrated system of air defense. Rodionov and Novichkov point to the vulnerability of the British warships to low-level attacks by missiles and emphasize the fact that only Sea Wolf among the SAM systems could engage missile targets effectively. In this context, the British fell back upon a reorganized defense, which placed those systems directly within the screen earmarked for the defense of the carriers, and the massive and sustained use of passive counter-measures, particularly the use of rocket-deployed chaff.<sup>55</sup>

Admiral Kapitanets, in his review of this phase of the campaign, concluded that air defense in the modern naval battle "can only be successfully carried out by the integrated use of various means of electronic warfare and with a density of automated surface-to-air missiles and anti-aircraft artillery that possess quick reaction time and a high density of fire."<sup>56</sup> Rear Admiral Uskov, while he noted the threat posed by Argentine missiles, emphasized the success of British forces during the second stage of the campaign. The loss of the Sheffield, as Rodionov and Novichkov infer, may have come as a shock to Admiral Woodward and the Admiralty, but throughout the blockade, British forces were able to engage in the "incremental use of force to weaken the garrison on the islands, cut its supplies and thereby prepare the way for the invasion with the least loss of blood."<sup>57</sup> However, this success was, according to Rodionov and Novichkov, a function of the failure of the Argentines to use their aviation decisively during this stage of the conflict. This, the authors



explain, was, in part, the result of a most unfavorable operational environment. While the Argentine air crews were both determined and brave, as their actions in the final stage of the contest demonstrated, they were forced to operate at the extreme operational range of their aircraft, had short loiter times over the target areas, and lacked both airborne reconnaissance--their Neptunes went out of service after the Super Etendards' attack on the Sheffield--and fighter air cover. In order to extend the operational time of their Sky Hawks over the target, the Argentines converted part of their force into air-to-air refueling planes and, thereby, had fewer attack aircraft available.

Soviet authors also point to other problems that degraded the Argentine aerial threat, including insufficient material-technical support, shortages of spare parts and effective ordnance, limited numbers of qualified air crews, inadequate combat training by air force crews in low-level attacks against naval targets, and a poorly organized system of command and control.<sup>58</sup> This devastating portrait of Argentine handicaps does much to explain the reluctance of the high command to commit its air assets until the decisive phase of the campaign, the invasion of the islands. Soviet authors, however, point to a more fundamental weakness in the Argentine operations during the second stage of the campaign: the absence of effective combined action between its aviation and naval forces.<sup>59</sup>

#### Amphibious Assault Phase

Soviet authors do not confine their commentary on the amphibious assault phase of the conflict to a discussion of the landings. Indeed, they devote substantially more space to the Argentine air attacks during

this period. As they point out, it was during this period that Argentine air activities assumed a massed scale and when their attack tactics were improved. Soviet authors discuss at length the massed air attacks of May 21 and call attention to the low-level bombing that was used by the Argentines against HMS Ardent.<sup>60</sup> The operational circumstances that required the deployment of British warships within the Falklands Straits to provide air defense of the beachhead and fire support radically improved the operational situation for Argentine aviation. Using the rocky outcroppings of the surrounding land to help conceal them from radar detection on their approach, pilots attacked on the deck with conventional bombs and rockets. In massed, echeloned attacks the Argentines tried to overwhelm the air defense system and gained some success. This would have been even greater had their bombs been properly armed for low-level attacks against maritime targets.<sup>61</sup>

During the final stage of the campaign Soviet naval officers seem to have been impressed particularly by the Argentine adaptation of low-level attacks with conventional bombs to the conditions of the modern, electronic battlefield. It is nevertheless noted that the shortage of missiles had an impact in leading the Argentines to this decision and the serious problems that they had with the conventional iron bombs which they used are emphasized. Still, the conclusion that Soviet authorities reach is that, in the confined waters of the Falkland Straits off San Carlos, the Argentines scored major successes, even if they were purchased at a high price of aircraft losses.<sup>62</sup> While Soviet authors discussed at length the tactics employed by Argentine aviation during its massed attacks of May 21 and later, they concluded that the British air defense system worked. British



losses were less a function of a failed air defense than the vulnerability of their surface ships to a serious damage from even one rocket or bomb.<sup>63</sup>

In their commentaries on the air battles during the final phase of the conflict, Soviet commentators are unanimous in their praise for the Sea Harriers in air defense. Although Rodionov and Novichkov do call attention to the poor operational circumstances under which Argentine fliers faced the Harriers--at extreme range, loaded down with bombs, often short of fuel and trying to get out of the combat zone to find their tanker planes, or armed with obsolete versions of the U.S. Sidewinder AAM--they still praised the Sea Harriers and their aircrews. They singled out for attention the Harrier's ability to engage in thrust vectoring during forward flight as a tactical advantage. The Harriers, with their more advanced Sidewinders, proved able to shoot down the Argentine aircraft while using passive counter-measures to confuse the infrared sensor of the Argentine AAMs. The Harriers, it was also noted, thanks to the proficiency of their crews, were able to conduct as many as six sorties a day allowing the British to maintain a constant combat air patrol over the operational fleet. On several occasions, Harriers used the helicopter pad of other warships for recovery when fuel shortages developed. Soviet authors were also impressed with the British practice of teaming Sea Harriers with Harriers so that the RAF Harriers, which had been reequipped to carry out air defense operations, could make use of the Sea Harrier's air-to-air radar. In such a fashion were the British able to get maximum utility out of the 50-odd VSTOL aircraft available to the fleet during the final phase of the campaign.<sup>64</sup>

The same authors point out that the relative effectiveness of certain British warships' air defense capabilities had a decisive impact on Argentine attack tactics. The Broadsword class destroyers, with their Sea Wolf SAM complexes for automated target acquisition and fire control, proved particularly effective. In one four-plane attack on May 12, a Broadsword class destroyer, using its GWS 25 Sea Wolf system, shot down two of the attacking planes, and a third was picked off by another escort. As a result of such experiences, Argentine aviators shifted their attacks towards other escorts that were equipped with less effective defenses against low-level attacks, particularly the British frigates and destroyers carrying the Sea Dart and Sea Cat SAM system. As the Soviet authors note, they enjoyed far greater success against such targets.<sup>65</sup>

The central conclusions that Soviet authors draw from the air defense battle over the beachhead at San Carlos and in the Straits are that modern air defense requires an integrated systems that can deal with both planes and cruise missiles. Kapitanets states that modern warships, fleet auxiliaries and transports must be equipped with air defense systems that include the latest radio-electronic technology, automated control systems, and SAM and AA complexes that provide a high density of fire on multiple targets. The system should also include active and passive electronic measures against cruise missiles.<sup>66</sup> However, he also notes the need for fighter aviation within the air defense umbrella. Kapitanets confirms that:

The experience of the conflict confirms the wisdom of deploying in task groups multi-mission, air capable ships for action in the oceanic zone which possess considerable attack power and high combat stability with multi-mission aircraft and helicopters.<sup>67</sup>

This endorsement of carriers for oceanic navies should be placed in a particular context used by Kapitanets. The Admiral suggests that naval forces should be theater specific in design and composition. Argentina, like other states who might be expected to operate in confined naval theaters and coastal seas, would have been better served if it had possessed a surface fleet composed of relatively small, rocket-armed craft with their own air defense capability.<sup>68</sup> Coming from the Commander of the Soviet Baltic Fleet, this point seems worthy of elaboration. If naval forces are supposed to be theater specific, then it stands to reason that the two Soviet fleets, the Baltic and the Black Sea which operate within such closed naval theaters should be equipped with such rocket-armed, minor, surface combatants. Then what of the Northern and Pacific Fleets with their oceanic missions? Certainly the Kiev and her sister ships do represent such multi-mission, air-capable warships, but do the threats posed by sophisticated attack missiles require a more powerful aircraft than the VSTOL Yak-36 Forger? Rear Admiral Uskov seems to be posing just this question when he concludes his treatment of the Falklands Conflict with the assertion, attributed to Western specialists, that "anti-ship missiles of the Harpoon and Exocet types will represent the major threat to surface warships, and that this, in turn, moves to the forefront the necessity of improving all elements of the system of defense against cruise missiles."<sup>69</sup>

Uskov's emphasis upon the improvement of all elements of the air defense system stands in contrast to Admiral Kapitanets' evaluation of the same matter. The Admiral asserted that combat action at sea confirmed the importance of the development and perfection of all components of the fleet and all classes of ships, including transports. He did point to the need to increase the combat stability of such ships in the face of air attack,

but taken in conjunction with his emphasis upon theater-specific naval forces, it can be argued that he was more concerned with improving the air defense capabilities of individual ships and less about an integrated system of air defense.<sup>70</sup>

Kapitanets' concept of theater-specific naval forces does not ignore the air component. Indeed, the Admiral, citing foreign press sources, emphasizes that the central lesson of the Falklands Conflict was "the necessity of the balanced development and use in close combined action of the major types of forces of navies--submarines, aviation and surface ships."<sup>71</sup> Kapitanets chose, however, to mention the role of nuclear submarines and the struggle with them as the first lesson of the Falklands and only then turned to aviation. Again citing the Western press, he noted that with the development of the means of air attack, the role of aviation in combat actions at sea continues to rise. Without seizing and keeping command of the air on an operational and tactical scale, it is impossible to count upon success of the battle or operation in general.<sup>72</sup> Taken with his comments regarding theater-specific naval forces, it would seem that Kapitanets believes that the Soviet solution of land-based aviation in closed theaters of naval operations is still adequate even in the face of the cruise missile threat. On the other hand, in oceanic theaters he leaves the impression that naval operations will require multi-purpose warships that can carry multi-mission aircraft and helicopters.

Soviet treatment of the invasion itself emphasizes the high level of operational art which the British employed in the landings and during the assault. The context of British success was, however, command of the air and sea in the landing area.<sup>73</sup> The Soviet authors were impressed by three distinct aspects of the British operation: their success in achieving

tactical surprise, the pace of the operation, and the integration of the latest technologies into the land assault. Tactical surprise, the Soviet authors point out, was crucial to the successful amphibious assault.

British diversionary efforts, which included demonstration shelling and the landing of commando parties at other points, confused the defenders. Under the cover of darkness, the British were able to get the first wave of their assault force ashore and, in the three hours before dawn, were able to deploy 1,000 men in a defensive perimeter covering 10 square kilometers and including means of anti-air and anti-tank defense. The Argentines were thus unable to mount a coordinated counter-attack against the beachhead at the time when the landing forces were most vulnerable.<sup>74</sup> Kapitanets, for one, credits the presence of modern landing craft and ships with a major influence upon the speed of the landings and concludes that such vessels made it possible to get the second echelon, which was assigned to the breakout from the beachhead and exploitation phase of the operation, ashore with dispatch.<sup>75</sup>

The helicopter proved its value both as a transport for airborne assault forces and as a fire-support tool. Evgen'ev singled out the employment of helicopters in the construction at San Carlos of a temporary airfield, made of steel mats, as a major contribution to the land offensive.<sup>76</sup> Helicopter assaults, according to Kapitanets, allowed the British to outflank strong points and keep the initiative, striking at the enemy where he did not expect a blow to fall, as in the case of the assault on Port Darwin and the airfield at Goose Green.<sup>77</sup> Soviet authors also note the role of the Harriers in providing effective air support for the landing and advance.<sup>78</sup> They point to the impact of the VSTOL technology on the outcome of the invasion. Among other British weapons systems that they



single out for comment upon are: the Scorpion light tank, the Milan anti-tank missile, the Blowpipe anti-air personnel missile, and the Rapier SAM complex.<sup>79</sup>

This discussion of this phase of Argentine air operations seems to confirm one of the historical lessons that Soviet naval research on World War II had revealed: that most naval losses take place in coastal waters. The research technique employed in this particular study was identified by Vice Admiral K.A. Stalbo as "reconstructive mathematical modeling."<sup>80</sup> And it would appear that the experience of the local war off the Falklands has confirmed the results of that particular exercise and the applicability of its conclusions to modern combat at sea.<sup>81</sup> Given the Soviet interest in forecasting, this conclusion may have serious implications for the lessons that Soviet naval officers draw out of the Falklands Conflict and apply to their own naval art.

#### Some Soviet Conclusions

Soviet authors in their conclusions about the Falkland Conflict have tended to address two distinct set of questions: those narrowly military-technical in nature and those of a political-military nature. As their discussion of the various phases of the conflict should suggest, they do see the need for an oceanic navy, engaging in power projection, to possess a "mobile rear," which should include large numbers of auxiliaries--those in naval service and those that can be mobilized in time of war; forward bases; and an extensive system of air transport. However, they also emphasize the need for well-worked out plans for speedy mobilization.<sup>82</sup>

At the same time, Soviet authors also point to the need to improve warship survivability and, particularly, air and rocket defense.<sup>83</sup> Kapitanets credits NATO with having begun a systematic study of the lessons of the Falklands Conflict and are drawing practical conclusions regarding the modernization of their organizational structure and the improvement of the effectiveness of their armaments. It would seem, however, that he and his fellow officers speak from a Soviet perspective when they point to cruise missiles like Harpoon and Exocet as the central threats from the air.<sup>84</sup>

Soviet authors are not in agreement regarding the role of surface combats in the Falklands Conflict. Kapitanets, with his emphasis upon theater-specific naval forces and the role of nuclear submarines, goes on to suggest that neither British nor Argentine surface warships performed satisfactorily. The Argentines, in his opinion, were paralyzed by the nuclear submarine threat, while the British warships proved vulnerable to cruise missile and conventional bomb attacks.<sup>85</sup> His solution to these problems is a balanced fleet that can perform both fleet versus fleet, and fleet versus shore operations.<sup>86</sup> In contrast to these views, Rear Admiral Uskov emphasized the central importance of surface combatants to British success. While admitting that nuclear submarines did play a key role in neutralizing the Argentine Navy, Uskov concluded:

As is clear from the analysis of the conflict, all the major goals relating to the blockade and seizure of the Malvinas (Falklands) Islands the English carried them out with the help of surface ships. This, in the opinion of Western specialists, confirms with all obviousness the rise of their role in warfare at sea.<sup>87</sup>

The Soviet admirals seem to be disputing what will be the definition of one of the most commonly used but still vague terms in Soviet naval



terminology: "the balanced fleet." In Kapitanets, the conclusion is that theater-specific naval forces will be balanced in a very different fashion from oceanic naval forces. Within that context, Kapitanets leaves intact the standard Soviet formational about the appropriate balancing of the various branches of naval forces: first submarines, then naval aviation, and finally surface ships. Uskov, on the other hand, makes a case for the reemergence of the surface warship as a necessary and co-equal component of naval power in fleet versus fleet, and fleet versus shore operations.<sup>88</sup>

At the political level, Soviet naval officers' conclusions have been circumspect. The Conflict once again demonstrated the Leninist thesis that capitalism cannot resolve its internal contradictions except through war. They characterize the British victory as the "triumph of the colonialist policy of Britain's Conservative government" and repeat the charge that U.S. support for Britain contributed to "the exaggeration of the military conflict." They have also noted with some satisfaction the fact that the conflict forced the U.S. to choose among its allies, between Britain and Argentina, between a NATO and a Pan-American orientation.<sup>89</sup> Their initial reaction was to draw some satisfaction from the naval losses imposed upon Britain and the long-term costs of a permanent British deployment in the South Atlantic as drawing down assets available to NATO.<sup>90</sup> This line has not, however, been repeated in later articles.

### Concluding Observations

If Soviet naval officers have been reticent about drawing political conclusions about the implications of the Falklands Conflict, Western analysts should take little heart. Their overall perception of the Conflict as one manifestation of increasing rivalry among capitalist states

of different levels of development was already given formal endorsement by Marshal Ogarkov.<sup>91</sup> This circumstance suggests greater Soviet efforts to undermine the U.S. alliance system and to increase its problems of coalition management. Soviet naval officers can take satisfaction out of two other trends which the Falklands Conflict seemed to confirm: the emergence of the possibility of resource wars between the North and South, and the increased reliance of the West upon an "oceanic strategy." Both trends will be used to promote the growth of the Soviet Navy.

Another ground for Soviet naval officers' satisfaction with the Falklands Conflict was precisely what can be learned about trends in warfare at sea. The Falklands Conflict, unlike many other contemporary local wars, cost the Soviet Union little but offers major dividends to its naval and military researchers. This point deserves reiteration to Western analysts and lay-readers alike. Naval officers and, indeed, the research apparatus of the General Staff of the Soviet Armed Forces are now making a sustained effort to reshape their perceptions about modern warfare on the basis of the lessons derived from the Falklands Conflict. Judging by the articles in Morskoi sbornik, this effort will be professionally competent, extensive and sustained. While Soviet military thinkers warn that it is necessary to take into account the peculiarities of all such local wars, they nonetheless see them as having "an importance for the perfection of military theory." The Falklands Conflict, like other local wars, will allow them to perfect their conception of modern warfare, i.e., "that they are grasped through the prism of contemporaneity."<sup>92</sup> We should anticipate serious consideration of the major issues raised by the Falkland Conflict to continue with Soviet naval circles. Their comments will deserve consideration by Western naval analysts.

## FOOTNOTES

## FOOTNOTES

<sup>1</sup>Jacob W. Kipp, "Das Russische Marineministerium und die Einfuhrung der Panzerschiffe, Marine-Rundschau, (April 1981), pp. 210-214; "The Russian Navy and Private Enterprise: A Peculiar Military Industrial Complex," in: B.F. Cooling, ed., War, Business and World Military-Industrial Complexes, (Port Washington, 1981, pp. 84-105; and "Tsarist Politics and the Naval Ministry, 1876-1881: Balanced Fleet or Cruiser Navy?" Forthcoming in Russian History.

<sup>2</sup>John Nott, "The Falklands Campaign," U.S. Naval Institute Proceedings, CIX No. 5, (May 1983), p. 125.

<sup>3</sup>Only a partial bibliography on the Falklands Conflict would include too many titles to list here. Major series of articles on the hostilities have been published in the following professional journals devoted to military policy: U.S. Naval Institute Proceedings, International Defense Review, Marine-Rundschau, U.S. Naval War College Review, and Morskoj sbornik. An obvious source of information on the Conflict is: The Falklands Campaign: The Lessons (London: H. M. Stationary Office, 1982).

Regarding the Conflict's impact upon Western defense problems, we can contrast the rather upbeat analysis offered by Professor Vojtech Mastny of the U.S. Naval War College in the May-June issue of that institution's review ("The Soviet Union and the Falklands War," U.S. Naval War College Review, XXXVI No. 3 (May-June 1983), pp. 46-55), where Mastny asserts that London's resolve and the support of her NATO allies, when coupled with substantial Western advantages in electronic warfare, heightened deterrence by showing that the West had a new margin of advantage, with the more problematic analysis of Paul F. Walker in the May 1983 issue of Scientific American ("Smart Weapons in Naval Warfare," Scientific American, CCXLVII No. 5 (May 1983), pp. 53-61). In contrast with Mastny, Walker concludes that the high lethality for surface ships in the Falklands Conflict demonstrated that navies can no longer count on going into harm's way in a theater dominated by shore-based aviation. Big ships, according to Walker, are good for only one thing--showing the flag in peacetime.

This author, as will become clear in the course of this article, does not believe that the Soviets agree with either Walker or Mastny. Indeed, Mastny's rather Pollyannaesque comments seem downright dangerous since they are presented as an analysis of Soviet commentary on the Conflict. Mastny seems to have little grasp of Soviet military theory or of naval affairs in general, and so his conclusions seem both premature and one-sided.

<sup>4</sup>Sovetskaia voennaia entsiklopediia, (Moscow, 1976-1980), II, p. 183. For a concise and informed discussion of the role of military science in Soviet military affairs, see: John Dziak, Soviet Perceptions of Military of Military Power: The Interaction of Theory and Practice, (New York, 1981).

<sup>5</sup>I. E. Shavrov and M. I. Galkin, eds., Metodologiya voenno-nauchnogo poznaniia, (Moscow, 1977), p. 8.

<sup>6</sup>Ibid. p. 59.

<sup>7</sup>Sovetskaia voennaia entsiklopediia, III, p. 225.

<sup>8</sup>Ibid., II, p. 221.

<sup>9</sup>Ibid., p. 231.

<sup>10</sup>S. E. Zakharov et. al., Istoriia voenno-morskogo iskusstva, (Moscow, 1969), p. 5.

<sup>11</sup>Ibid.

<sup>12</sup>Ibid.

<sup>13</sup>Ibid.

<sup>14</sup>Shavrov & Galkin, pp. 143-145.

<sup>15</sup>Ibid., pp. 144-145.

<sup>16</sup>Ibid., p. 146.

<sup>17</sup>Ibid., p. 151.

<sup>18</sup>On the Gorshkov series, "Navies in War and Peace," see: James McConnell, "The Gorshkov Articles, the New Gorshkov Book, and their Relation to Policy," in: Michael McCGwire and John McDonnell, eds., Soviet Naval Influence: Domestic and Foreign Dimensions, (New York, 1977), pp. 556-620. On the recent Soviet debate about naval theory, see: Robert C. Suggs, "The Soviet Navy: Changing of the Guard?" U.S. Naval Institute Proceedings, (April 1983), pp. 36-42. See also: Strategic Review, (Fall 1981), pp. 104-109 and (Spring 1982), pp. 98-102.

<sup>19</sup>John Erickson, "The Soviet Military Press: A Review (1978)," in: Soviet Military Digest, (Defence Studies University of Edinburgh), Edinburgh, n.d.), pp. 16-21.

<sup>20</sup>"Aviatsiia protiv korablei," Morskoi sbornik, No. 7 (July 1982), pp. 89-91. The Soviet press did carry two articles by Soviet naval officers about the Conflict while hostilities were in progress. See Vice Admiral A. Gontaev's article in Pravda (April 26, 1982, and Vice Admiral K. A. Stalbo's piece in Kasnaia zvezda (May 23, 1982).

<sup>21</sup>Rear Admiral I. Uskov, "Uroki anglo-argentinskogo konflikta i rol' korablei v bor'be na more," Morskoi sbornik, No. 11 (November 1982), pp. 87-92; Captain 1st Rank B. Rodionov and Captain 2nd Rank N. Novichkov, "Taktika deistvii aviatsii protiv korablei," Morskoi sbornik, No. 12 (December 1982), pp. 80-87; Captain 1st Rank B. Rodionov and Captain 2nd Rank N. Novichkov, "Radioelektronnaia voina v iuzhnoi atlantike," Morskoi sbornik, No. 1 (January 1983), pp. 77-85; Admiral I. Kapitanets, "Rol' Flota v anglo-argentinskom konflikte," Morskoi sbornik, No. 2 (February 1983), pp. 14-20; E. Ratkin, "Stavka na vnezapnost," Morskoi Sbornik, No. 3 (March 1983), pp. 81-85 and N. Evgen'ev, "Podvizhnoi tył angliiskikh VMS v iuzhnoi atlantike," Morskoi sbornik, No. 4 (April 1983), pp. 78-80.

<sup>22</sup>Uskov, p. 87.



23"Aviatsiia protiv korablei," p. 89; Kapitanets, p. 14; p. 87.

24Kapitanets, p. 14. "Aviatsii protiv korablei," (p. 89) did mention the oil reserves but did not put their presence within a Marxist-Leninist context.

25S. B. Gorshkov, The Sea Power of the State, (Annapolis, 1979), pp. 1-58. This is the U.S. edition of the English translation of Morskaiia moshch' gosudarstva, 2nd edition (Moscow, 1976).

26Sergei Gorshkov, "Sovremennye problemy izucheniia i osvoeniia mirovogo okeana," Morskoi sbornik, No. 12, (December 1982), pp. 16-26.

27Vice Admiral K. A. Stalbo, "Nekotorye voprosy teorii razvitiia i ispol'zovaniia VMF," Morskoi sbornik, No. 4 (April 1981), pp. 22-23. For the elaboration of Stalbo's concept of a Western "oceanic strategy," see: K. A. Stalbo, "Zigzagi amerikanskoi bol'shoi strategii," Morskoi sbornik, No. 8 (August 1971), pp. 93-98. Stalbo linked together his ideas of a Western shift to an oceanic strategy with what he foresaw as a new round of imperialist competition of natural resources to be found in the sea. See: K. A. Stalbo, "The Significance of the Seas and Oceans in Combat Actions," in: Selected Readings from "Military Thought," 1963-1973, Studies in Communist Affairs, V, Part II, (Washington, 1983), pp. 73-77. The original appeared in Voennaia mysl', No. 3 (March 1971). Stalbo returned to this theme in his discussion of the tasks confronting Soviet naval science in 1973. See: K. A. Stalbo, "Naval Science: Structure and Tasks," Voennaia mysl', No. 7 (July 1973), pp. 73-74. This is FBIS FPD 0037, Translations from Voennaya mysl'.

28Kapitanets, p. 14.

29Rodionov & Novichkov, "Taktika," p. 80.

30Evgen'ev, p. 78.

31Kapitanets, p. 16; and Uskov, pp. 87-88.

32Uskov, p. 88.

33Evgen'ev, p. 78.

34Ibid., pp. 78-79.

35Ibid., pp. 79-80.

36Ibid., p. 80.

37Ibid.

38Marshal N. V. Ogarkov, Vsegda v gotovnosti k zashchite otechestva, (Moscow, 1982), p. 50. See also: Marshal N. V. Ogarkov, "Za nashu Sovetskemu Rodinu: Zashchita mirnogo truda," Kommunist, No. 10 (October 1981), pp. 80-91. It is worth noting that prior to the Falklands Conflict, Ogarkov asserted: "Inter-imperialist contradictions are also deepening and



the struggle for markets and raw materials and energy resources is becoming fiercer." (p. 81)

<sup>39</sup>Kapitanets, p. 20.

<sup>40</sup>Uskov, p. 87; and Kapitanets, p. 14.

<sup>41</sup>Uskov, pp. 87-88.

<sup>42</sup>Uskov, p. 88.

<sup>43</sup>Rodionov & Novichkov, "Taktika," pp. 80-82. B. Rodionov has emerged as a technical expert in the Soviet Navy on modern naval combat. Rodionov's Protivolodochnye sily i sredstva flotov, (Moscow, 1977) offered a survey of U.S. and NATO ASW capabilities with a minimal amount of political digression.

<sup>44</sup>Kapitanets, p. 17.

<sup>45</sup>Uskov, p. 92.

<sup>46</sup>Kapitanets, p. 17.

<sup>47</sup>Uskov, p. 92.

<sup>48</sup>Kapitanets, p. 17.

<sup>49</sup>Ibid.

<sup>50</sup>Rodionov & Novichkov, "Radioelektronnaia," p. 77 & "Taktika," pp. 81-84.

<sup>51</sup>Ibid., "Taktika," pp. 82-83.

<sup>52</sup>Ibid., "Radioelektronnaia," p. 77.

<sup>53</sup>Ibid., p. 78.

<sup>54</sup>Ibid., p. 78.

<sup>55</sup>Ibid., pp. 78-80.

<sup>56</sup>Kapitanets, p. 17.

<sup>57</sup>Uskov, p. 89.

<sup>58</sup>Rodionov & Novichkov, "Radioelektronnaia," p. 84.

<sup>59</sup>Kapitanets, pp. 15-16; and Uskov, pp. 89-90.

<sup>60</sup>Rodionov & Novichkov, "Taktika," pp. 84-85; and "Radioelektronnaia," p. 78.

<sup>61</sup>Ibid., "Taktika," pp. 84-85.

<sup>62</sup>Rodionov & Novichkov, "Taktika," pp. 84-86; and "Radioelektronnaia," pp. 78, 84.

<sup>63</sup>Ibid., "Radioelektronnaia," p. 83.

<sup>64</sup>Ibid., "Taktika," pp. 86-87.

<sup>65</sup>Ibid., "Radioelektronnaia," pp. 84-85.

<sup>66</sup>Kapitanets, p. 17.

<sup>67</sup>Ibid.

<sup>68</sup>Ibid., p. 18.

<sup>69</sup>Uskov, p. 92.

<sup>70</sup>Kapitanets, p. 17.

<sup>71</sup>Ratikin, pp. 81-82.

<sup>72</sup>Ibid., and Kapitanets, p. 17. Kapitanets' emphasizes theater-specific naval forces should be taken quite seriously. Not only does Russian historical experience confirm such an emphasis on the deployment of forces designed for operation within a given maritime theater, but also the tenor of the Soviet discussion of the concept "theater of military operations" (teatr voennykh deistvii) underscores such a deployment. See: Sovietskaia voennaia entsiklopediia, VIII, pp. 8-9.

<sup>73</sup>Ibid., p. 20.

<sup>74</sup>Ibid, pp. 18-19.

<sup>75</sup>Ibid., pp. 19-20.

<sup>76</sup>Evgen'ev, p. 80.

<sup>77</sup>Kapitanets, p. 20.

<sup>78</sup>Uskov, p. 90. Uskov's attention to the Harrier/Sea Harrier combination as being capable of both air defense and ground attack missions may suggest a technical agenda for the further development of Soviet VTOL aircraft, given the performance limitations of the Yak-36 Forger. Rodionov & Novichkov ("Taktika," p. 84) cautioned against seeing the VSTOL aircraft as an air superiority fighter.

<sup>79</sup>"Aviatsiia protiv korablei," p. 91.

<sup>80</sup>Stalbo, "Tvorchestvo v issledovanii problem voenno-morskoi istorii," Morskoi sbornik, No. 2 (February 1977), p. 24. Stalbo's discussion of "reconstructive mathematical modeling" deserves serious consideration since it appears to be a central technique used by the Soviet military to generate statistical data for their modeling of combat operations. Stalbo states that the technique makes it possible, first of

all, "to work out real models for events of any scale and also to realize them on computers on a wide diapason of the initial data, getting all possible variants of the outcome and results of the events, including those having a place as only theoretical possibilities. Second, by optimizing the results of the events of the past under review in the necessary combination and according to selected criteria, the researcher can objectively evaluate the correctness of the decisions taken. And, finally, analyzing the results of the computer simulation of this or another historical events, the researcher can compare their factual course and outcome with the actions, which were obtained in the modeling of the optimal variant."

<sup>81</sup>Rodionov & Novichkov, p. 85. Kapitanets attributes to Western commentators the sentiment that "in the local war in the South Atlantic, the methods of the combat use of naval forces the tendencies, which arose during the Second World War and in the postwar period, were manifested." (p. 20).

<sup>82</sup>Evgen'ev, p. 80; and Uskov, p. 92.

<sup>83</sup>Rodionov & Novichkov, "Radioelektronnaia," p. 85.

<sup>84</sup>Kapitanets, p. 20; and Uskov, p. 92.

<sup>85</sup>Kapitanets, p. 17.

<sup>86</sup>Kapitanets, p. 20.

<sup>87</sup>Uskov, p. 92.

<sup>88</sup>Ibid.

<sup>89</sup>Kapitanets, p. 20.

<sup>90</sup>"Aviatsiia protiv korablei," p. 81.

<sup>91</sup>Ogarkov, Vsegda, pp. 6-7.

<sup>92</sup>Shavrov & Galkin, p. 199.